

	Type	L #	Hits	Search Text	Dbs	Time Stamp	Comments	Error Definition	Error
1	BRS	L1	283	molecular adj switch (transcription adj factor) or (transcriptional adj regulatory adj protein) or (transcriptional adj regulatory adj factor) or (DNA adj binding adj protein)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:37			0
2	BRS	L2	9218		USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:39			0
3	BRS	L3	61	1 same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:39			0
4	BRS	L4	10528	regulat\$ same (gene adj expression)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:42			0
5	BRS	L5	1655	4 same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:42			0
6	BRS	L6	6863	transgene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:42			0
7	BRS	L7	8	3 same 5	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:48			0
8	BRS	L8	1	3 same 6	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:49			0
9	BRS	L9	11	5 same 6	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:49			0

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(FILE 'HOME' ENTERED AT 14:55:55 ON 08 JUL 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA'
ENTERED AT

14:56:25 ON 08 JUL 2002

L1 3583 S MOLECULAR SWITCH
L2 350882 S (TRANSCRIPTION FACTOR) OR (TRANSCRIPTIONAL
REGULATORY PROTEIN
L3 221 S L1 (P) L2
L4 64328 S TRANSGENE
L5 5 S L3 (P) L4
L6 2 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)
L7 861966 S GENE EXPRESSION
L8 44711 S L2 (P) L7
L9 626 S L8 (P) L4
L10 223 S DNA BINDING COMPOUND
L11 1 S L9 (P) L10
L12 1 S L3 (P) L10
L13 0 S L12 NOT L11

=> log y

transcription factor*** CAMP-response element-binding protein (CREB) occur in learning and memory, pain, and drug addiction. This mechanism may also be important for cytomegaloviral infections of the brain. The human cytomegalovirus major immediate-early promoter/enhancer (hCMV promoter), rate-limiting for productive cytomegalovirus infection, contains five CAMP-response elements (CREs). Indirect evidence suggests that this promoter does not function in unstimulated neurons. Here we test the hypothesis that expression from the hCMV promoter in neurons is induced by membrane depolarization. For these experiments, we infected cultured sympathetic and hippocampal neurons with hCMV-green fluorescent protein (GFP) promoter/reporter constructs using adenoviral gene transfer techniques and measured ***transgene*** expression by quantifying GFP fluorescence and GFP mRNA levels. We found that depolarization up-regulates promoter activity by >90-fold. Moreover, our results from pharmacological experiments suggest that this induction occurred through a CREB-dependent pathway. Importantly, site-directed mutagenesis of all five CREs in the promoter blocked this up-regulation almost completely, whereas mutating four of them had no effect. We conclude that the hCMV promoter acts as a ***molecular*** ***switch*** in neurons and is strongly induced by membrane depolarization, neuronal activity, or other stimuli that activate CREB. These results may provide insight into molecular mechanisms of cytomegalovirus-related diseases of the brain.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:628284 CAPLUS

DOCUMENT NUMBER: 133:233573

TITLE: Inducible regulatory systems for control of gene expression

INVENTOR(S): Lim, Moon Young; Edwards, Cynthia A.; Fry, Kirk E.; Bruce, Thomas W.; Starr, Douglas B.; Laurance, Megan E.; Kwok, Yan

PATENT ASSIGNEE(S): Genelabs Technologies, Inc., USA

SOURCE: PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000052179	A2	20000908	WO 2000-US5728	20000303
WO 2000052179	A3	20001221		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1165808	A2	20020102	EP 2000-913742	20000303
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1999-122513P P 19990303

US 1999-154605P P 19990917

WO 2000-US5728 W 20000303

AB Inducible gene expression systems regulated by a ligand are described. The system includes a nucleic acid construct which has a DNA response sequence for a ***transcriptional*** ***regulatory*** ***protein*** operably linked to a promoter, a compd. binding sequence in the vicinity of the DNA response sequence, a ***transgene*** under the control of the promoter; and a DNA binding compd. In some cases, the ***mol*** . ***switch*** system further includes a nucleic acid sequence encoding a ***transcriptional*** ***regulatory*** ***protein*** operably linked to a second promoter. The invention further provides a method for screening compds. for the ability to function in the ***mol*** . ***switch*** system and thereby regulate gene expression.

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L5 5 S L3 (P) L4
L6 2 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)

=> s gene expression

4 FILES SEARCHED...

L7 861966 GENE EXPRESSION

=> s l2 (p) l7

L8 44711 L2 (P) L7

=> s l8 (p) l4

L9 626 L8 (P) L4

=> s DNA binding compound

L10 223 DNA BINDING COMPOUND

=> s l9 (p) l10

L11 1 L9 (P) L10

=> s l11 1 ibib abs

MISSING OPERATOR L11 1 IBIB

The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> d l11 1 ibib abs

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1165808 A2 20020102 EP 2000-913742 20000303

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L10     223 S DNA BINDING COMPOUND
L11     1 S L9 (P) L10
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=> s l3 (p) l10

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L12     1 L3 (P) L10
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=> s l12 not l11

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L13     0 L12 NOT L11
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=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	47.09	47.30
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.24	-1.24

STN INTERNATIONAL LOGOFF AT 15:04:40 ON 08 JUL 2002